Contour Farming (acre)

Definition

Farming sloping land in such a way that preparing land, planting, and cultivating are done on the contour. (This includes following established grades or terraces or diversions.)

Purpose

To reduce erosion and control water.

Conditions where practice applies

On sloping cropland and on recreation and wildlife areas where other cultural and management practices in a cropping system do not control soil and water loss.

Planning considerations

Water Quantity

1. Effects on the water budget, especially on volume and rates of runoff and infiltration.

2. Potential for a change in plant growth and transpiration because of changes in the volume of soil water.

Water Quality

1. Potential for development of saline seeps or other salinity problems resulting from increased infiltration in the presence of restrictive layers.

2. Effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances carried by runoff.

Specifications guide

Alignment requirements with terraces, diversions, or contour strips, and where contouring is used without these practices and allowable deviation from the contour or specified grade and row length.

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Soil Conservation Service

Technical Guide
Section IV
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CONTOUR FARMING (Acre)

Specifications Guide

1. The full benefits of contouring are obtained only on fields relatively free from gullies and depressions, other than grassed waterways. Use this practice when the "P" value is equal to or less than 0.7, as determined by procedures in the USLE handbook. Land smoothing should be considered a prerequisite to contouring on fields with non-uniform surfaces.

2. For effective contouring, all tillage operations should be as near level as practical. A master guide row may be laid out between terraces to ensure continuous grade on rows for crops sensitive to ponding water such as tobacco.

3. Contouring without terraces, diversions, or contour sod strips is feasible on some fields. Permanent reference points should be identified or guidelines laid out on fields that do not have structural measures as guides.

4. Contouring appears to be the most effective with high ridges on slopes in the 3 to 8 percent range. The following limits assume slope lengths short enough for full effectiveness of the practice.

Slope (%)	Maximum Length (Feet) Conventional Tillage[1]	Conservation Tillage[2]
1 - 2	400	500
3 - 5	300	400
6 - 8	200	250
9 - 12	120	150
13 - 16	80	100
17 - 20	60	75
21 - 25	50	60

[1] Crop residues are removed or inverted by plowing or heavy disking.

[2] Non-inversion tillage that retains at least 50 percent residue cover on the soil surface during crop establishment.